A NEW FISCHERIA (ASCLEPIADACEAE)

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Recent study of this genus has revealed the existence of a new species from Ecuador and Bolivia.

Fischeria aequatorialis Spellman, sp. nov.

(Plate 7).

Plantae praeter folia totae brunneae puberulentes; calycis lobis ovalibus ad angusto-ovalibus; lobis corollae ovalibus ad subrotundis, adaxiale papillosis, papillis in vittam latam dispositis vel omnino tegentibus, aliter glabris praeter pilis sparsis circiter sinum, marginibus undulato-crispatis, ciliatis; corona distincte quinqueloba, lobis tenuibus praeter margines distincte crassos; ovariis dense pubescentibus ad glabratis.

Plants densely brown puberulent throughout except on the leaf blades, stems sparsely to densely pilose, hairs brown, septate, 2-4 mm long. Leaves elliptic to slightly obovate, somewhat coriaceous, apically acuminate, basally cordate, lobes imbricate, blades 7-16 cm or more long, 4-11 cm wide, sparsely strigose to velutinous above, velutinous below; petioles sparsely to densely pilose, 2.5-6 cm long. Inflorescence sparsely pilose, peduncles mostly 8-12 cm long, pedicels 1-2 cm long. Flowers 1.6-2.1 cm in diameter; calyx abaxially brown puberulent and sparsely pilose, adaxially glabrous, lobes ovate to lance-ovate, acute, 2.8-5.5 mm long, 1.5-2.5 mm wide; corolla rotate-campanulate, green-white to white, lobes broadly ovate to suborbicular, 5.5-7 mm long, 5-7 mm wide, abaxially pubescent, trichomes sparse near the base, increasing in density to the apex, adaxially papillate, papillae prominent either as a wide median band or generally dispersed over entire surface, otherwise glabrate, a few scattered long hairs near margins of the band of papillae and around the sinuses, one margin undulate-crispate, ciliate on crispate margin; gynostegium ca. 1.5-2 mm high, anthers dorsally inflated, inflated portion subquadrate in surface outline, 1-1.2 mm long, 1-1.4 mm wide, staminal membranes rounded to triangular, covering only the margin of the stigmahead; corona prominently 5-lobate, less than 1 mm high, lobes centrally thin, marginally thickened; pollinia sacs subreniform in outline, dorsal margin sterile, pellucid, 0.86-0.93 mm long, 0.55-0.62 mm wide, translator arms 0.14-0.27 mm long, corpuscula sagittate, 0.27-0.34 mm long, 0.14-0.24 mm wide; ovaries glabrate to densely short pubescent. Follicles unknown.

A distinctive species of western South America, Fischeria aequatorialis comprises two subspecies from opposite sides of the Andes.

Fischeria aequatorialis subsp. aequatorialis.

(Plate 7).

The typical subspecies is now known only from Ecuador where it is found from near sea-level to about 1000 meters. Its habitat has been variously described as swampy ground, primary forest, and roadside tangles. Flowering collections have been gathered in February, September, and November.

TYPE: ECUADOR: GUAYAS: 2-4 km E from Recinto Olon, ca. 10 km N of Manglaralto, near sea-level, 19 Feb. 1974, A. Gentry 10039 (HOLOTYPE: MO, ISOTYPES: GB, S).

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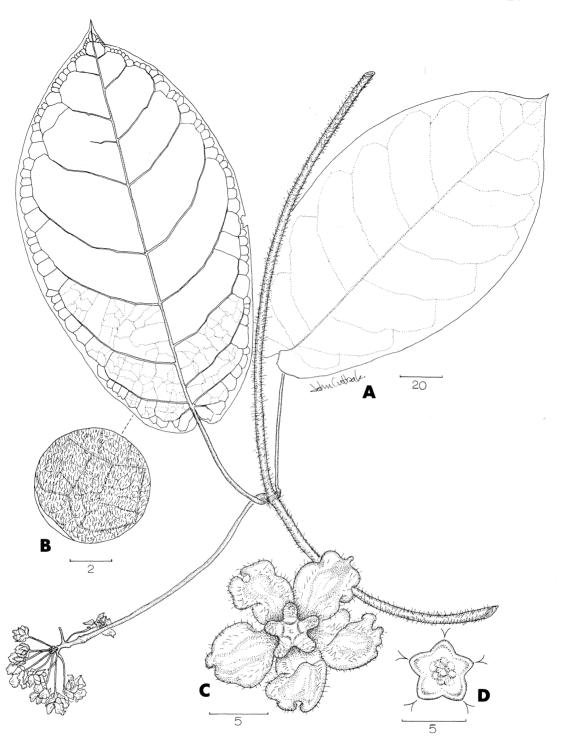


Plate 7. Fischeria aequatorialis Spellman subsp. aequatorialis. A, habit; B, lower leaf surface; C, flower; D, corona. All scales in millimeters.

ADDITIONAL MATERIAL EXAMINED: ECUADOR: Los Ríos: Río Palenque Science Center, km 56 Quevedo-Santo Domingo, alt. 150-220 m, 27 Feb. 1975, Dodson 5787 (MO, SEL, US, RPSC); Hacienda Clementina, alt. 30 m, 23 Feb. 1947, Harling 318 (S); entre Quevedo & Naranjal, alt. 100 m, 7, 8 Nov. 1934, Mexia 6658 (MO, UC, US); IMBABURA: Playa Luisa below Magnolia, lower Intag Valley, alt. ca. 1000 m, 17 Sept. 1944, Drew E-670 (US).

Fischeria aequatorialis subsp. cardenasii Spellman, subsp. nov.

Differt a subspecie typica foliis utrinque velutinis; inflorescentiis distincte pilosis; lobis calycis abaxialibus dense pilosis; lobis corollae ovalibus, papillosis adaxiale, papillis in vittam latam dispositis; lobis coronae distincte striatosulcatis ad margines.

Leaves velutinous on both surfaces. Peduncles and pedicels distinctly pilose. Flowers with the calyx lobes 5.5-6 mm long, 2-2.5 mm wide, densely pilose abaxially, adaxial surface basally glabrous, short strigose in apical half; corolla lobes ovate, apically acute, adaxial surface papillate in a broad median band, long pubescent at the base, densely so around the sinuses; corona lobes thinly carnose except for the thickened margins, margins conspicuously striate-sulcate; gynostegium ca. 1.5 mm high.

TYPE: BOLIVIA: LA PAZ: Chojlla (=Chugllas?), alt. 2200 meters, April 1957, Martin Cardenas 6053 (US).

This subspecies, known only from the type collection, differs from the typical one in having more dense, long, pilose hairs over the entire plant, especially on the pedicels, and calyx lobes. The corollas, coronas, and pollinia of both subspecies are nearly identical, although subsp. *cardenasii* has corolla lobes which are more ovate than subsp. *aequatorialis* and margins of the corona lobes which are striate-sulcate rather than smooth.